OECD
DEVELOPMENT ASSISTANCE COMMITTEE

Guidelines on Aid and Environment

No. 1

Good Practices
for Environmental Impact Assessment
of Development Projects

Paris 1992

OECD
DEVELOPMENTASSISTANCE COMMITTEE
Guidelines on Aid and Environment

The OECD Development Assistance Committee (DAC) seeks to improve and co-ordinate Member policies which will integrate development and environment imperatives. The Guidelines are designed to help policy-makers and practitioners address serious national, regional and international environmental problems.

Guidelines No.1: *Good Practices for Environmenal Impact Assessment (EIA) of Development Projects* urge aid agencies to assess the environment impact of deelopment assistance projects as early as possible in the project planning process. The basic rationale and main components are laid out in a clear, succinct format for non-specialists, explaining:

- *why an EIA is important*
- *what it should contain*
- *what steps should be followed, and*
- *how it can be integrated in project planning*
- *design and implementation*

In December 1991, OECD Ministers of Environment and of Development Co-operation endorsed these, and other guidelines, on country environmental surveys and strategies, involuntary displacement and resettlement in developing projects, and global environmental problems. This consensus of OECD Member countries is indicative of strong donor support for the efforts of developing countries to manage and protect the environment and to minimise environmental effects of economic development.

Development Co-operation Directorate
Organisation for Economic Co-peration and Development
2, rue André Pascal
75016Paris

THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;

- to contribute to sound economic expansion in Member as well as non-Member countries in the process of economic development; and

- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995) and Hungary (7th May 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

In order to achieve its aims the OECD has set up a number of specialised committees. One of these is the Development Assistance Committee, whose Members have agreed to secure an expansion of aggregate volume of resources made available to developing countries and to improve their effectiveness. To this end, Members periodically review together both the amount and the nature of their contributions to aid programmes, bilateral and multilateral, and consult each other on all other relevant aspects of their development assistance policies.

The Members of the Development Assistance Committee are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, the United States and the Commission of the European Communities.

DAC GUIDELINES ON AID AND ENVIRONMENT

The OECD Development Assistance Committee (DAC) seeks to improve and co-ordinate Member policies which will integrate development and environment imperatives. Through its Working Party on Development Assistance and Environment, the DAC is preparing a series of Guidelines on subjects relating to Aid and Environment. These Guidelines are designed to help policy-makers as well as practitioners in donor agencies and developing countries to prepare strategies to address serious national, regional and international environmental concerns.

In December 1991, OECD Ministers of Environment and Development Co-operation endorsed the following four guidelines:

1. *Good Practices for Environmental Impact Assessment of Development Projects;*
2. *Good Practices for Country Environmental Surveys and Strategies;*
3. *Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects;*
4. *Guidelines for Aid Agencies on Global Environmental Problems.*

This consensus of OECD Member countries is indicative of strong donor support for the efforts of developing countries to manage and protect the environment and to minimise environmental effects of economic development.

Guidelines No.1 ***Good Practices for Environmental Impact Assessment of Development Projects (EIA)*** urge aid agencies to assess the environmental impact of development assistance projects which because of their nature, size and location could significantly affect the environment. The basic rationale and main components are laid out in a clear, succinct format so that non-specialists can easily become familiar with and integrate the EIA into the planning process from as early a stage as possible.

These Guidelines are only one aspect of many DAC activities which bear on sustainable development. The subject of recommendations in the near future will pertain to areas of high priority interest to developing countries as well as to aid agencies. These include chemical management, including accident prevention and prior informed consent; pesticides and integrated pest management; natural disaster reduction; primary environmental care; environmental economics and environmental capacity building.

TABLE OF CONTENTS

GOOD PRACTICES FOR ENVIRONMENTAL IMPACT ASSESSMENT OF DEVELOPMENT PROJECTS

Introduction

OECD Members have agreed to ensure that "development assistance projects and programmes which, because of their nature, size and/or location, could significantly affect the environment, should be assessed at as early a stage as possible and to an appropriate degree from an environmental standpoint" (OECD Council Recommendation on Environmental Assessment of Development Assistance Projects and Programmes of 1985).

OECD Members have also been called upon to actively support the formal adoption of an environmental assessment policy for their development assistance; to develop effective procedures establishing responsibilities at the planning, implementation and supervisory levels; and to ensure that adequate human and financial resources are provided in a timely and cost-effective way. (OECD Council Recommendation on Measures Required to Facilitate the Environmental Assessment of Development Assistance Projects and Programmes of 1986.)

To ensure that environmental aspects are taken into account -- for both bilateral and multilateral development assistance -- in the identification, planning, implementation and evaluation of projects and programmes, and noting that the DAC had developed a set of "Principles for Project Appraisal" (OECD, Paris 1988), the OECD Council adopted in 1989 a Recommendation concerning an Environmental Checklist for Possible Use by High-Level Decision-Makers in Bilateral and Multilateral Development Assistance Institutions. The essence of the three Council Recommendations is incorporated in the present document.

DAC Members have established the following "Good Practices for Environmental Impact Assessment (EIA) of Development Projects". The following main elements have been identified:

-- Environmental aspects must be fully integrated in project selection, design and implementation and the administrative responsibilities for the environmental aspects of assisted projects should be clearly determined.

-- The EIA must be conducted, together with screening and scoping, at least for the projects identified by the 1985 OECD Council Recommendation.

-- The EIA should address all the expected effects on human health, the natural environment and property as well as social effects, particularly gender specific and special group needs, resettlement and impacts on indigenous people resulting from environmental changes.

-- The EIA should consider alternative project designs (including the "non-action" alternative) as well as required mitigation and monitoring measures.

-- In conducting EIA of projects, donors should use the standards that will achieve the minimum level of "acceptable", non-mitigable negative effects and maximise the positive effects.

-- The utility and relevance of the EIA depend critically on the availability of Country Environmental Surveys and Strategies (on which the DAC has established a companion set of "good practices"). They should be taken into account wherever available.

-- Active arrangements including access to information should be made wherever possible to obtain the views of the affected indigenous population on projects which could have significant environmental effects.

-- The EIA should enable a clear statement of significant beneficial and adverse environmental and related social effects and risks of the project to be made.

-- Off-site effects, including transboundary, delayed and cumulative effects, should be assessed.

-- The governments of developing countries bear the ultimate responsibility for the state of the environment in their respective countries and for the design of the development projects. However, when transboundary and international issues affect the environment situation in developing countries, the governments causing these problems should bear the responsibility for solving these environmental problems in the respective developing countries.

Basic Purpose of Environmental Impact Assessment

Environmental Impact Assessment is a procedure used to examine the environmental consequences, both beneficial and adverse, of a proposed development project and to ensure that these consequences are taken into account in project design. The EIA evaluates the expected effects on human health, the natural environment and on property; it may also include social effects including gender-specific and special group needs, resettlement and impacts on indigenous people. The EIA should consider alternative project designs (including the "no-action" alternative), as well as mitigation measures or environmental safeguards that should be incorporated into the project design to offset adverse impacts. The assessment will be most useful if it is initiated at the earliest stage of project design to ensure from the outset that aid projects are environmentally sound and sustainable.

Integration into the decision-making and implementation process

Formal EIA processes and regulations by Member governments are intended to ensure that environmental aspects are integrated into the decision-making process of the host country, the aid agency and other institutions involved in project design and implementation. It is essential that environmental assessment is an integral part of the process of project selection, design and implementation. This should be clearly established in the project selection procedures and the

administrative responsibilities for the environmental aspects of assisted projects should be specifically determined.

Projects most in need of environmental impact assessment

Projects generally requiring an EIA are listed in the 1985 Council Recommendation under the following headings:

- those which cause a substantial change in renewable resource use;
- those which substantially change farming and fishing practices;
- the exploitation of hydrological resources;
- infrastructure;
- industrial activities;
- extractive industries;
- waste management and disposal.

In-depth environmental assessments should be conducted not only for development assistance projects which may affect human health due to air and water pollution, but also for projects which may have adverse impacts on endangered plant and animal species or their critical habitats, protected areas, or on biological diversity. Special consideration should be given to the need for assessments of projects in very fragile environments, such as tropical forests, wetlands, mangrove swamps, coral reefs and semi-arid areas.

Coverage of environmental impacts

The term environmental impact is understood to include:

-- effects on human health and well-being, the environmental media, eco-systems (including flora and fauna), agriculture and buildings (classified as protected);

-- effects on climate and atmosphere;

-- use of natural resources (both regenerative resources and mineral resources);

-- utilisation and disposal of residues and wastes;

-- related aspects such as resettlement, archeological sites, landscape, monuments and social consequences as well as relevant upstream, downstream and transboundary effects.

Time required for initial environmental impact assessment during project planning

Initial EIA procedures that occur before submission of the EIA report (see below) do not necessarily lead to delays in project planning, as is often believed. Experience shows that delays in

the planning of projects and costly conflicts in the implementation stage can be avoided by a thorough and timely EIA and thus actually result in savings of time and costs.

The time needed for an initial EIA during the planning phase is difficult to determine as it is linked to the planning procedure, the type of project and the circumstances in the host country, while it also depends on the availability of baseline data. The average amount of time needed from scoping to the completion of the EIA ranges from three months to two years depending on the scale and nature of the project. It is recommended that an EIA be integrated and thus carried out simultaneously with other planning activities (e.g., engineering, feasibility or cost-benefit analyses). This is important not only to avoid delays but also to make the EIA process more efficient by a common use of data.

Costs of environmental impact assessment

The costs of an EIA are commensurate with the complexity and significance of the problem and the level of detail required. They normally amount to a relatively small percentage of total investment, varying between 0.1 and 2.0 per cent. The avoidance of harmful environmental impacts and the maximisation of beneficial impacts may well outweigh the cost of an EIA process and higher investment outlays in the long term. Although initially an EIA may be relatively more expensive to implement in areas where little is known about environmental and social conditions, its costs will decline once the procedures and techniques become established and assessment personnel become accustomed to their tasks. Exchange of information among DAC Members, especially baseline data and EIA techniques for particular types of projects, would contribute to a further reduction of the costs of EIAs.

Members' experience

Since most DAC Members are still in the process of establishing ways to carry out environmental impact assessments of their development activities, they have not yet acquired sufficient experience with implementation. Some Members have adopted formal, legally binding procedures for development assistance, while others opt for a more informal ad hoc approach to environmental impact assessment.

Good Practices for Environmental Impact Assessment

Common practices

Ideally, the EIA procedures for development projects should be based on good common practices among donors to the effect that:

-- the recipient countries are aware that all DAC donors and multilateral agencies postulate certain requirements of EIA for development projects;

-- consultants, technical, environmental and social, are informed about the consensus among donors in regard to the requirements of EIA;

-- EIAs are sufficiently comparable so that they can be shared and used by other donors;

-- similar standards are used for the analysis, based on generally accepted notions of the extent to which disturbances of eco-systems are "acceptable".

Basic requirements

Although EIA will differ in detail depending on the type of project, its technicalities and the particular circumstances in the recipient country, a body of "good practices" can be established to harmonize the approach of DAC Members in this field. The good practices for EIA set out below have been synthesised from various sources, in particular from the three above-mentioned OECD Council Recommendations, recent technical literature, and the experience of those aid agencies which have been applying EIA for some time.

EIA should be viewed as an integral part of the project planning process. It should begin with an early identification of project alternatives and the potentially significant environmental impacts associated with each of them. The assessment should continue through the planning cycle with public participation in the developing country wherever possible. Ideally, it should be followed up by monitoring and post-audit evaluation.

Responsibility for environmental impact assessment

The governments of the developing countries bear the ultimate responsibility for the state of the environment in their respective countries and for the design of the development projects. However, donors need to ensure that an EIA of the aid-assisted project takes into account the environmental laws and regulations of recipient governments and also the donor's development co-operation standards. Only in cases where the recipient country has not yet adopted a legal framework for environmental protection will the project sponsor be solely responsible for the EIA. The technical competence of the sponsor and of the local authorities should be supported to the greatest possible extent. Developing-country counterparts should be involved in the process to ensure that the perspectives of their agencies are taken into account, that they understand the value of the process, and that the recommendations of the environmental assessment are implemented. Insofar as possible, local environmental consultants should be included on assessment teams. The EIA should be approved by the host-country government with an indication of the required changes and amendments.

Procedural principles

It is recommended to carry out the EIA for at least those projects which belong to a category listed above.

The EIA should start as early as possible and be conducted together with the first examination of the project.

The subject area of the EIA should be determined especially if it has to go beyond the scope of the usual project appraisal.

The initial EIA -- preferably integrated -- should start not later than the feasibility study and be completed before the detailed planning of the project.

The EIA should take into account the findings of Country Environmental Surveys and Strategies -- if available in the recipient country -- in view, inter alia, of the intersectoral aspects of the project. In case a large number of small-scale projects are expected to have a cumulative environmental impact, flow diagrams may be useful.

All feasibility studies should have at least a separate chapter on the environmental and related social impacts, while for projects with major environmental problems a non-technical summary of the environmental aspects should be prepared.

Screening

It is recommended that the EIA procedure starts with a screening session to determine whether or not a thorough environmental impact assessment is required, as outlined above. The screening process allows environmental reviews to be focused on those projects which are most likely to have significant impacts on the natural or physical environment. Certain kinds of assistance activities may be thereby automatically excluded from an environmental review. Examples of such activities include education or training programmes and programmes involving nutrition and family-planning services. It may not be warranted to exclude research activities altogether, since some may have or lead to considerable positive and/or negative environmental effects.

It is also recommended to identify projects with considerable positive environmental impacts because some governments need this classification for statistical purposes or apply preferential treatment to these kinds of projects.

Where potentially hazardous installations are being considered, the possible risks to health and safety should be considered in the screening process. Bilateral and multilateral aid agencies should ensure that an assessment of accident potential is carried out prior to providing financial assistance to support new or expanded installations. (For further explanation on the elements of this assessment, see the "Guiding Principles on Accident Prevention, Preparedness and Response" OECD, Paris 1991.) The following fundamental questions should be posed:

- which alternative projects could provide comparable benefits?
- what is the appropriate level of public safety in relation to hazardous technologies?
- what degree of environmental protection should be guaranteed for areas of significant environmental value?

The screening enables authorities to reject at the earliest stage those projects that are environmentally unacceptable or whose negative impacts are expected to outweigh the benefits.

In order to improve the quality of an EIA and to limit costs, it is recommended to classify projects at an early stage according to the kind of EIA required. For instance, the carrying-out of an EIA and the judgement on the necessity of mitigating measures and monitoring are different for environmental effects emanating from pollution than for those resulting from physical disturbances of the environment.

Scoping

Once the decision has been made to proceed with an EIA, the scoping process should begin immediately after the screening of a project. This process results in the identification of the most significant environmental issues (often including social issues) raised by the project, the timing and extent of analysis required, the sources of relevant expertise and suggestions for mitigating measures. At this point, the responsibilities and schedules for the EIA can be identified. For projects which require a thorough EIA, scoping involves a comprehensive gathering of data, concerns and expertise from appropriate national, regional and local agencies in the recipient country, from the affected population groups and representatives of non-governmental organisations as well as from the specialists responsible for the EIA.

Careful screening and scoping can benefit the EIA process by identifying the "significant" environmental issues and the most important consequences at the outset in order to avoid delay and additional costs at a later stage of project implementation. Screening and scoping could be a single exercise.

Involvement and motivation of local institutions and target groups

Donors and recipients should work together to make full use of competent expertise available locally for both the design and implementation of aid-financed projects, taking account of the diversity of country situations.

The environmental institutions of the developing country should be involved to the greatest extent possible. Ideally, the competent institutions and relevant regulations should be mentioned in the project proposal or identified in the first examination of the project. The terms of reference for the environmental part of the feasibility study or the separate environmental assessment should be worked out, if possible, with the advice and consent of environmental authorities of the recipient country. Since the project-related EIA should also aim at strengthening the capabilities of the developing country in the environmental field, particular weaknesses should be identified at that stage.

The participation of both women and men in the population affected (target groups as well as other affected groups) should be sought. As a result, changes may need to be introduced in priorities for aid policies and programmes, in the design of aid projects and in the selection of less bureaucratised channels and new partners for development.

The participation of non-governmental organisations in the recipient country should be encouraged, especially if they have expertise not available from official sources. In this regard, due consideration needs to be given to the values and political procedures of the recipient country.

Greater emphasis should be given to ensuring the commitment of recipients' executing agencies through their active involvement in selection, design and implementation. For many types of projects, active involvement of end-users and beneficiaries, e.g., through communities and other local organisations, is essential to ensure that the project mobilises local energies and meets actual needs and circumstances.

The environmental impact assessment report

The specific issues to be addressed in the EIA document should be identified in the scoping process described above. In general the terms of reference for a thorough EIA should include the responses to the following questions:

- a description of the surroundings of the project and the baseline conditions of the environment (e.g. existing pollution or specially sensitive areas) against which the future impacts can be assessed;
- an evaluation of the environmental effects of supplying the project with water, energy, raw materials, etc.;
- an analysis of the impact of the project on the local population, including attention to gender issues;
- an evaluation of the disposal of waste water, solid wastes and emissions (regardless of whether this is the responsibility of the project sponsor);
- the identification of positive and negative environmental impacts with an indication of their magnitude, if possible in monetary terms;
- an analysis of opportunities for environmental enhancement;
- a presentation of the legal and policy framework, including the relevant environmental standards of the host country and the necessary licensing procedures together with a discussion of these standards;
- an evaluation of the effects of environmentally relevant pricing policies, taxes and subsidies;
- an evaluation of the resulting impacts, specifying the standards used as the basis of judgement;
- a consideration of basic alternatives and an estimation of the consequences of discarding the project altogether;
- proposals for adequate mitigation measures or alternative designs to limit negative environmental impacts, including proposals for operation and monitoring;
- a comparison of project alternatives and mitigation measures in terms of their potential for eliminating adverse impacts, the associated capital and recurrent costs, suitability under local conditions, and the institutional, training and monitoring requirements;

- a statement of measures for the protection and/or resettlement of affected population groups, indicating their reactions to proposals on these issues (for details see the DAC "Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects");
- a statement on where and how related matters not necessarily included in the EIA are treated;
- a non-technical summary including the major recommendations.

External review

If at all practicable an outside and independent review of the environmental assessment might contribute to the success of the procedure, in particular in the case of large projects. The purpose of the review is to obtain an impartial judgement of the particular, and often conflicting, interests of various parties involved and to avoid unnecessary costs and delays. It is therefore urged that the review be held before the final EIA report is submitted for consideration by the aid agency and the counterpart agency. To arrive at an "impartial" judgement, the review should not be done exclusively by ecologically oriented persons or institutions but by a competent licencing authority (if such an independent authority exists in the recipient country) and/or by competent authorities in the donor country. The decision to proceed with an external review should be left to the recipient country's discretion.

Internal review

Donor agencies should establish a central authority responsible for providing general guidance on environmental assessment procedures and for assuring the adequacy and quality of the final EIA documents. Whenever major EIAs are undertaken, the authority should have qualified staff at its disposal, including expert consultants from a wide range of sciences (ecology, biology, agriculture, forestry, biochemistry, health care, etc.). These experts need not be part of the permanent staff of the donor agency.

Decision-making process

The results of the EIAs should be fully and adequately taken into account when deciding whether or not to approve development assistance projects. The central authority mentioned above should ensure that due consideration is being given to the EIA results in every case.

Monitoring and auditing

It may turn out that the EIA will be discontinued after the project implementation when the participating donors have relinquished their co-responsibility and influence. The EIA should, therefore, contain recommendations for monitoring and auditing during operations to ensure conformity with requirements as well as to test the accuracy of evaluations and provide a basis for

future adjustments. These recommendations ought to designate the responsible persons and sources of finance. Monitoring of environmental impacts and environmental accounting can provide useful information for possible project modifications and for the implementation of similar projects in the future.

Environmental monitoring is the task of special authorities who usually deal with a wide variety of projects. The quality of monitoring and auditing work does not depend so much on the EIA but rather on the competence of these authorities and the environmental administration in developing countries. Hence it is not necessary for an EIA to provide precise long-term planning for environmental inspections as donors would otherwise not be able to transfer responsibility for the project wholly to the recipient country. Rather, donor and recipient countries should arrive at an understanding that:

-- the project plan should specify the necessary measures, facilities and equipment for inspection and monitoring;

-- the organisational units for monitoring activities should be designated;

-- the required surveillance should be outlined, indicating the respective responsibilities of the project sponsor and the competent authorities;

-- special attention should be paid to the reliability of the monitoring equipment;

-- inspection and monitoring should be included in the training of the operating personnel; and

-- outside inspection and monitoring should preferably be implemented by the local authorities.